Title (en)
DYNAMIC TRANSFORM IN BLOCKCHAIN HEADER VALIDATION

Title (de)
DYNAMISCHE TRANSFORMATION IN EINER BLOCKCHAIN-HEADERVALIDIERUNG

Title (fr)
TRANSFORMÉE DYNAMIQUE DANS UNE VALIDATION D'EN-TÊTE DE CHAÎNE DE BLOCS

Publication
EP 3912119 A1 20211124 (EN)

Application
EP 20741242 A 20200103

Priority
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Abstract (en)
[origin: US2020228319A1] Integrated circuits, methods, and computer programs are directed to performing proof-of-work (POW) operations. One integrated circuit includes a nonce register for storing a nonce value, a first one-way function (OWF) circuit configured to generate a hash of a header, a dynamic transform circuit configured to transform the hash of the header to generate a transform value, and a second OWF circuit configured to generate a hash of the transform value to obtain a validation parameter. The header includes the nonce value for POW validation of the header. Further, the transformation by the dynamic transform circuit is based on the nonce value. The validation parameter determines whether the POW meets a predetermined target for validation of the header with the nonce value.

IPC 8 full level
G06Q 20/06 (2012.01); **G06Q 20/36** (2012.01); **H04L 9/06** (2006.01)

CPC (source: EP KR US)
G06F 9/30029 (2013.01 - KR); **G06F 9/30134** (2013.01 - KR US); **H04L 9/0637** (2013.01 - KR US); **H04L 9/0643** (2013.01 - KR US); **H04L 9/0863** (2013.01 - EP); **H04L 9/3239** (2013.01 - EP KR); **H04L 9/3297** (2013.01 - EP KR); **H04L 9/50** (2022.05 - EP KR); H04L 9/50 (2022.05 - US)

Designated contracting state (EPC)
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BA ME

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US 11296866 B2 20220405; **US 2020228319 A1 20200716**; CN 113597627 A 20211102; CN 113597627 B 20230630; EP 3912119 A1 20211124; EP 3912119 A4 20220309; KR 20210116552 A 20210927; WO 2020150011 A1 20200723

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